Installation

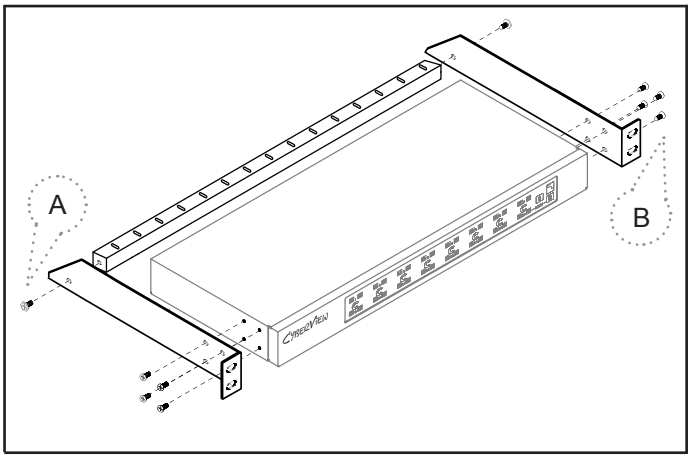


Figure 1. Installing the bracket to the KVM.

screw A: M3.2 x 4.5 mm

screw B: M4 x 10 mm

■ Install each bracket using screws provided shown in **Figure 1.**

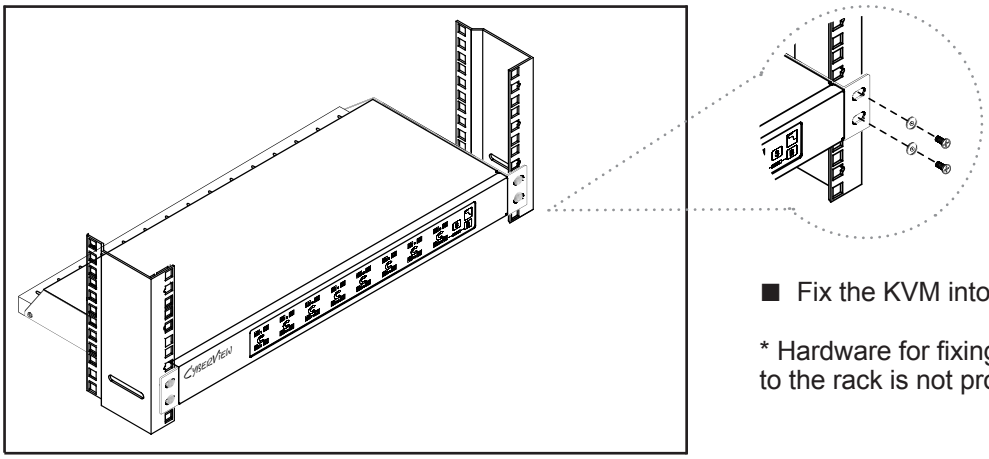


Figure 2. Fixing the KVM into the rack.

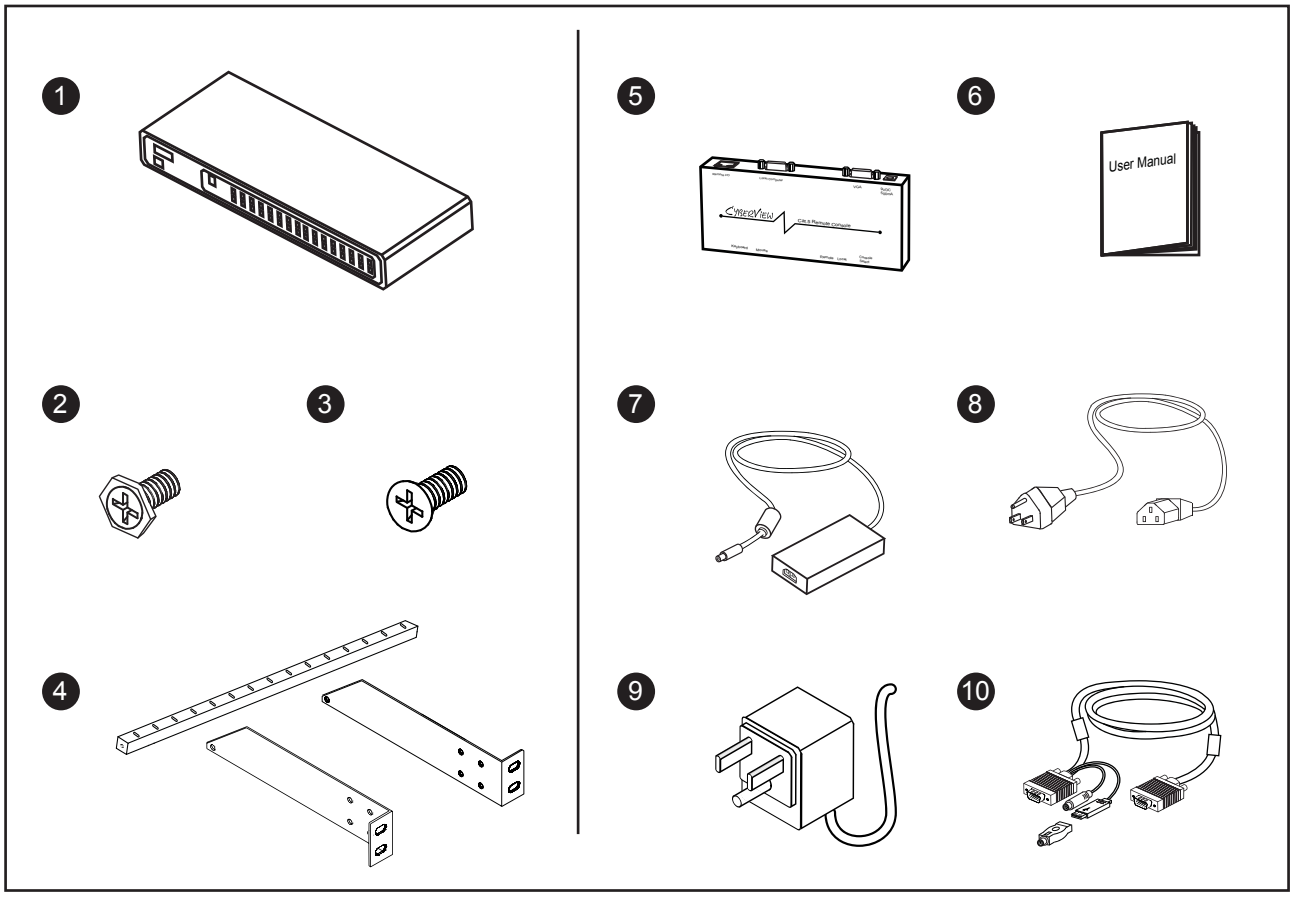
■ Fix the KVM into the rack

* Hardware for fixing the mounting bracket to the rack is not provided

M-IP813 / M-IP814 / M-IP824

Matrix IP DB-15 8 port KVM

Package Content (only for rackmount KVM)



① KVM switch x 1 pc

② Screw M3.2 x 4.5mm x 4 pcs

③ Screw M4 x 10mm x 8 pcs

④ Bracket x 1 set

⑤ Receiver *Qty refer to the below table

⑥ User manual x 2 pcs

⑦ 12V Power adapter (for KVM) x 1 pc

⑧ Power cord x 1 pc

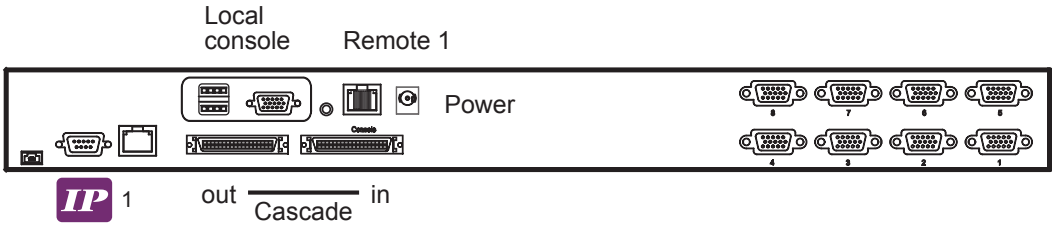
⑨ 12V Power adapter (for receiver) *Qty refer to the below table

⑩ CE-6 Combo 4-in-1 KVM cable (for receiver) *Qty refer to the below table

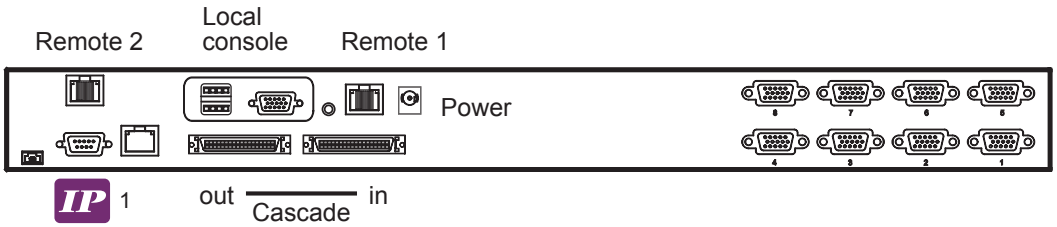
Model	Receiver Qty	12V Power adapter Qty	CE-6 Combo 4-in-1 KVM cable Qty
M-IP813	1	1	1
M-IP814	2	2	2
M-IP824	1	1	1

Connection

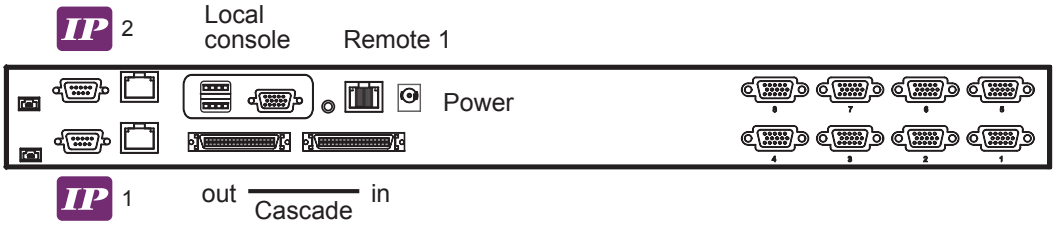
M-IP813



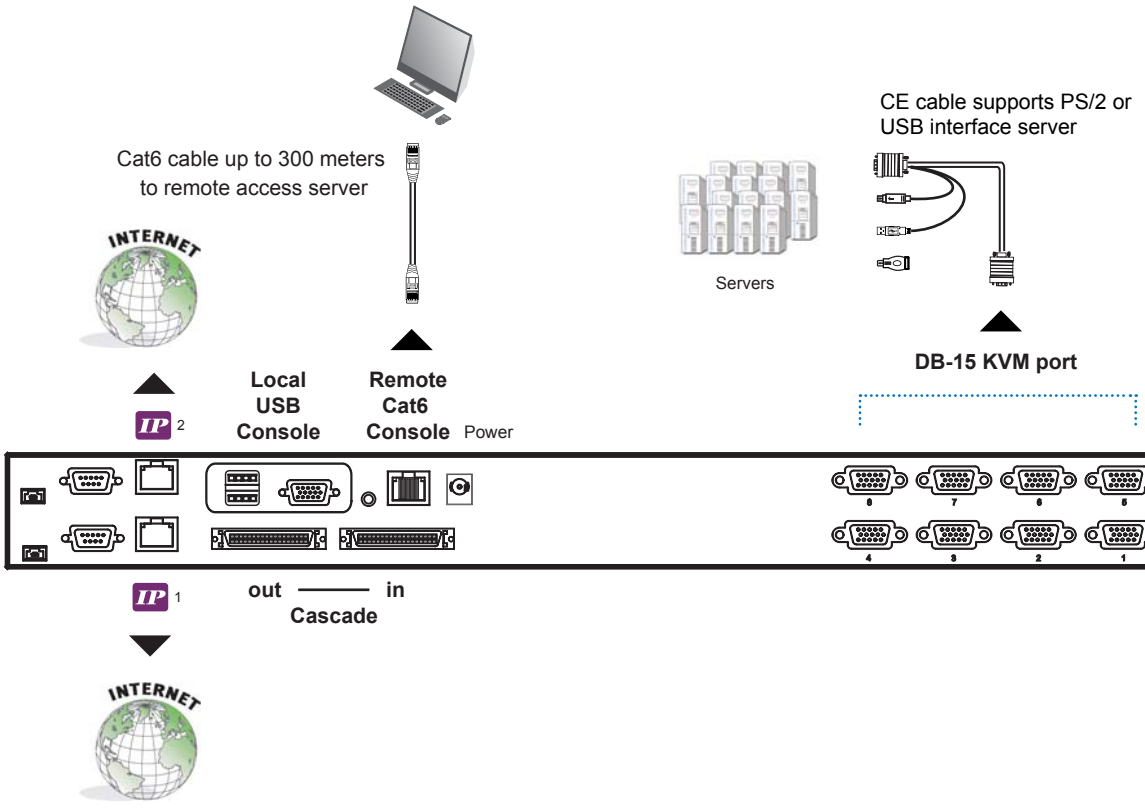
M-IP814



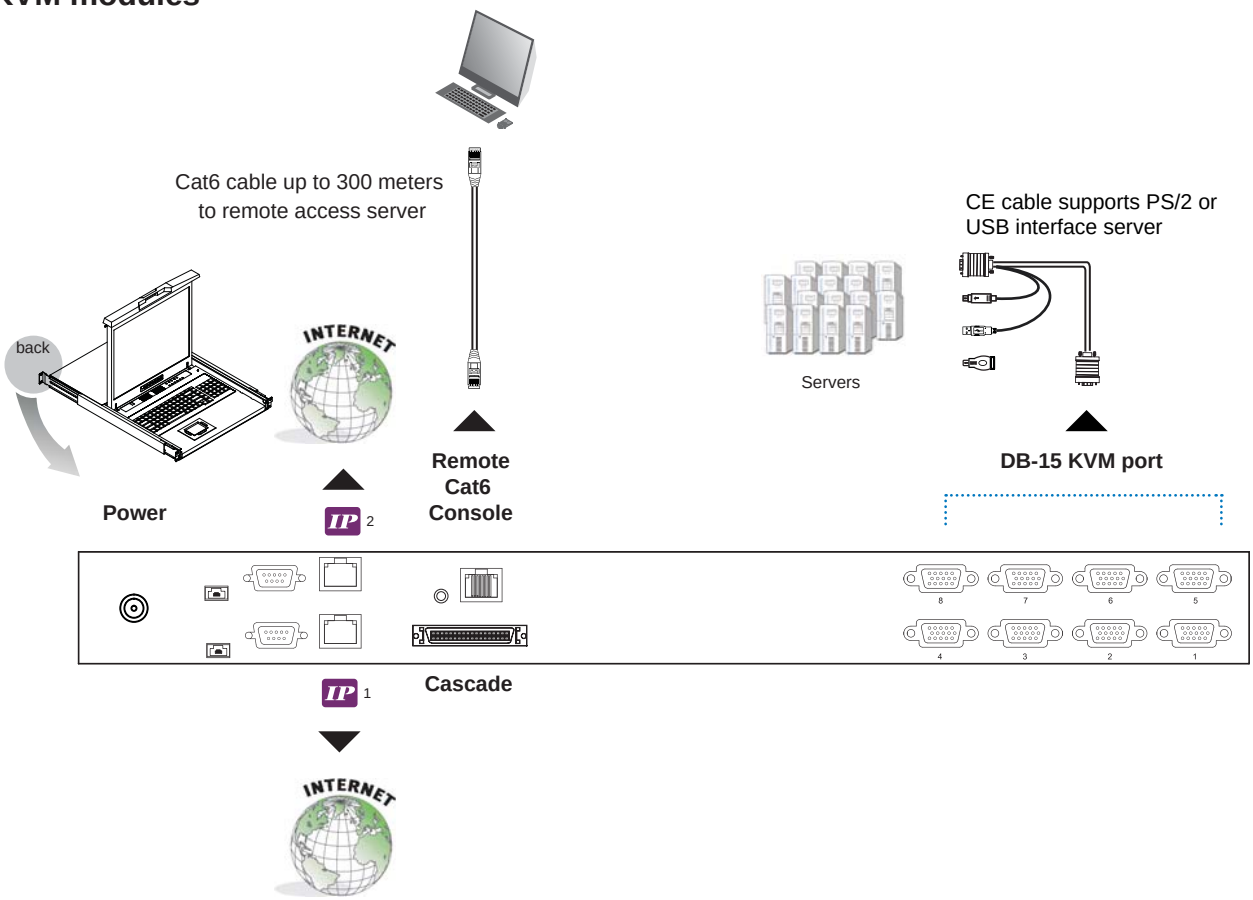
M-IP824



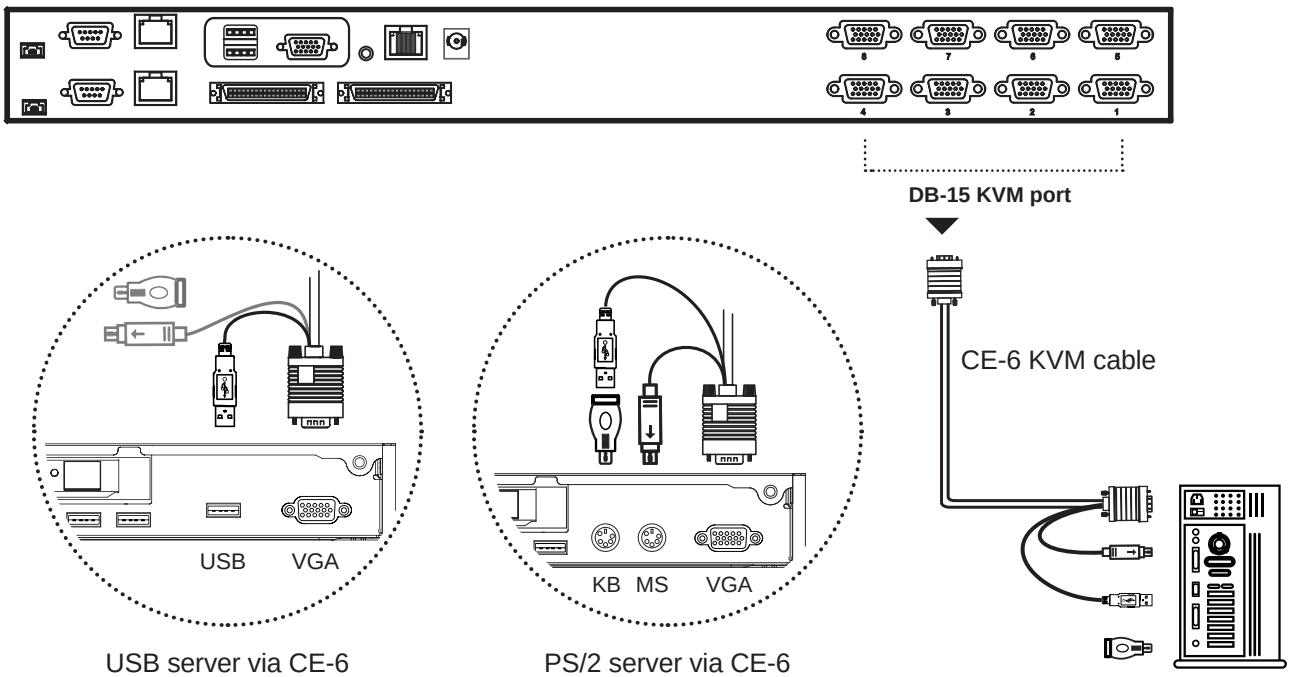
Connection Rackmount KVM



Connection
KVM modules



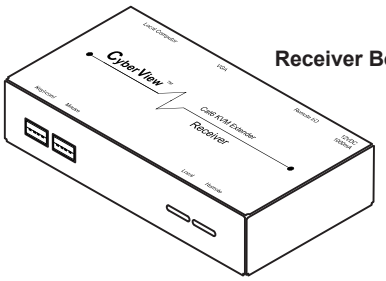
Connection
CE-6

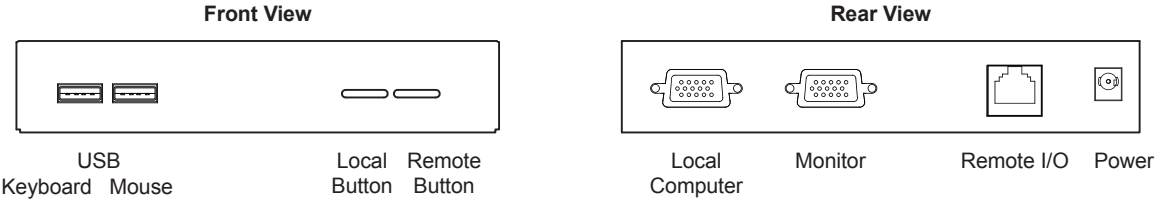


M-IP813 / M-IP814 / M-IP824

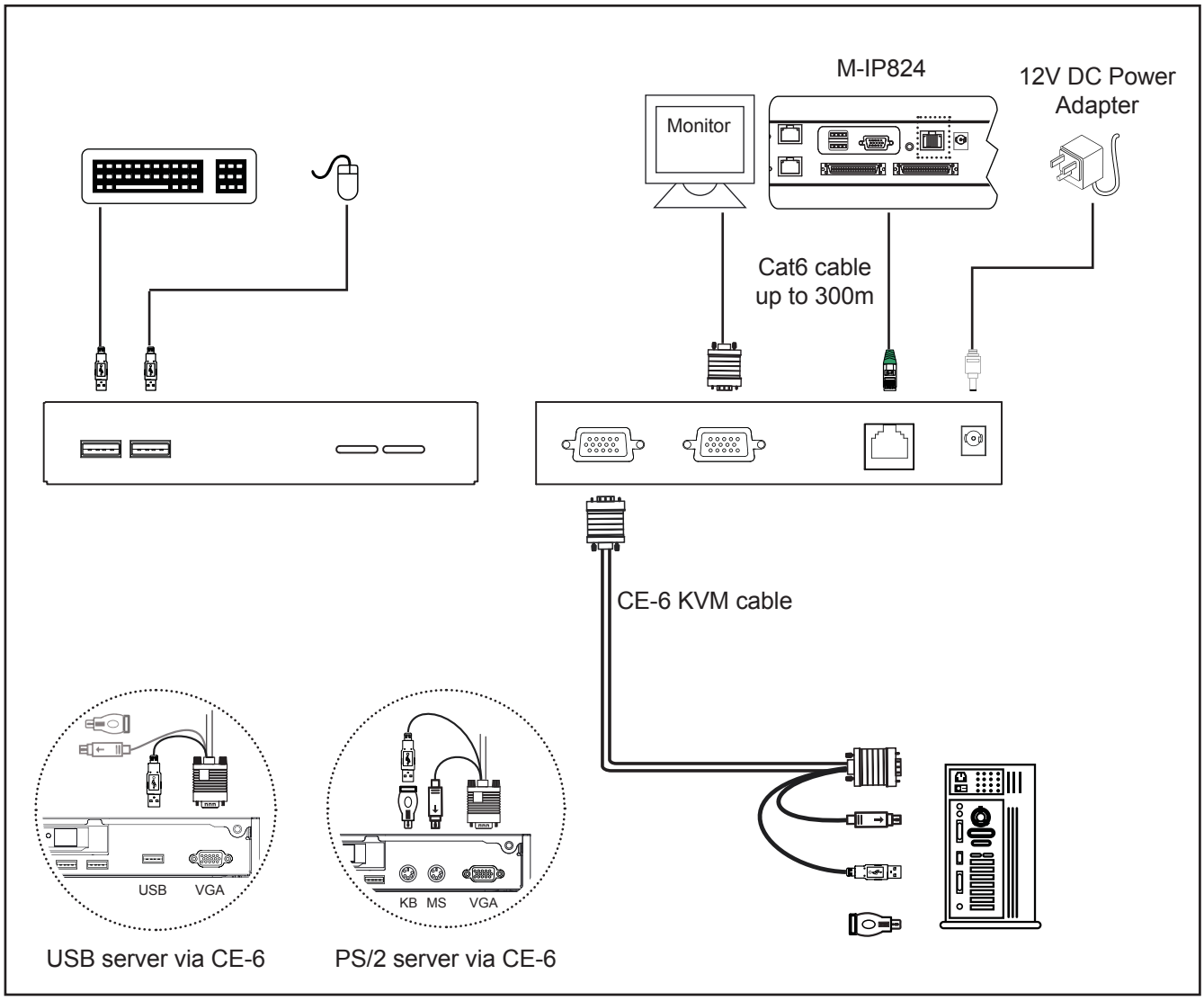
Matrix IP DB-15 8 port KVM

Receiver





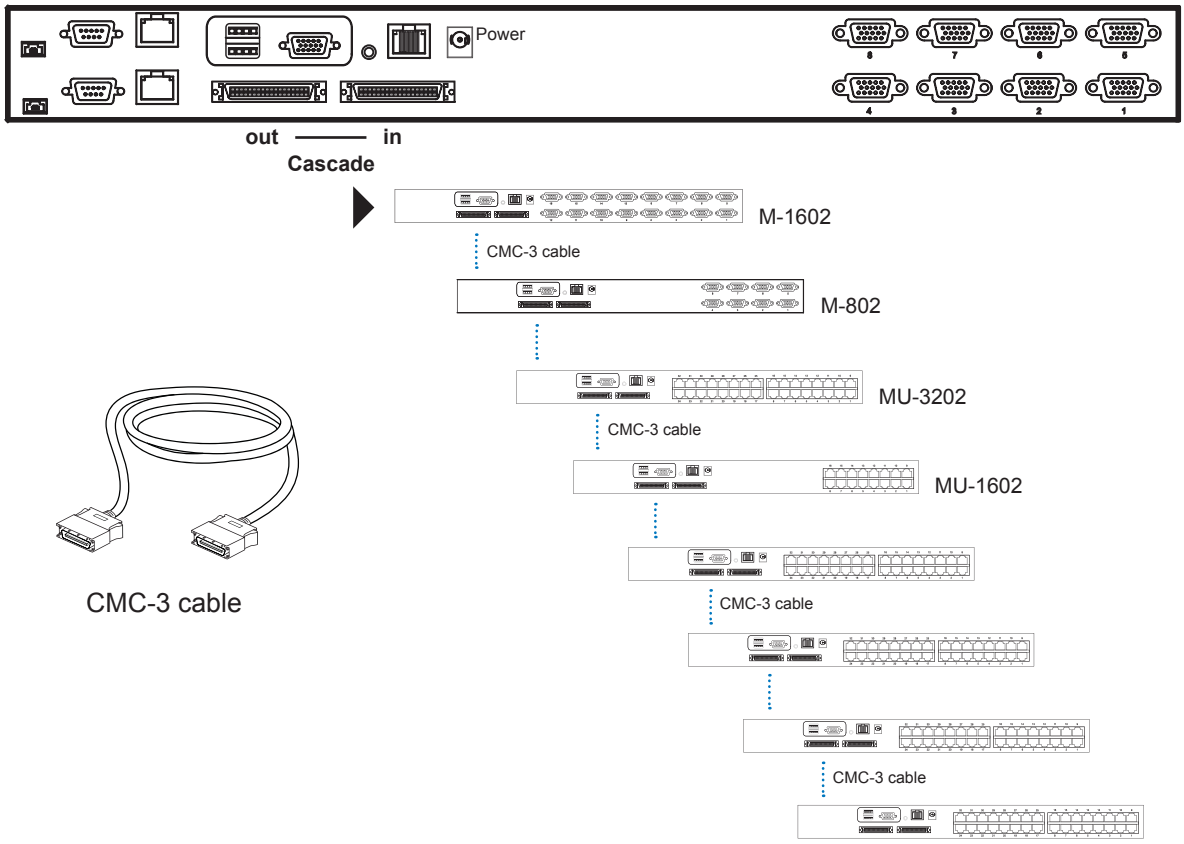
Receiver Connection



Cascade

- Cascade up to 8 levels, 64 servers
- Interconnection with Matrix Cat6 KVM
- Cascading multiple KVM by CMC-3 cable.

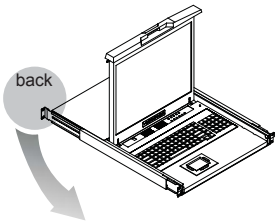
Cascade
Rackmount KVM

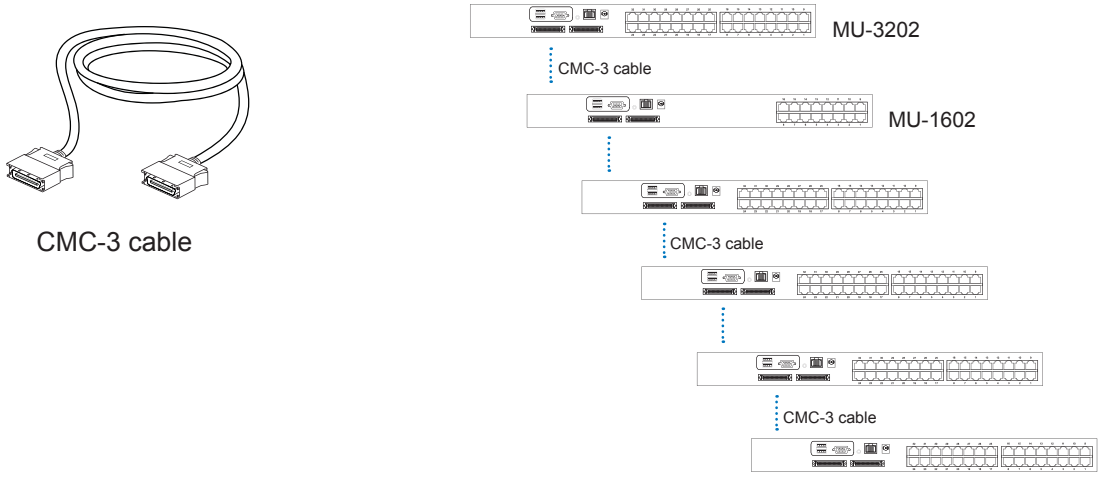


Cascade

- Cascade up to 8 levels, 64 servers
- Interconnection with Matrix Cat6 KVM
- Cascading multiple KVM by CMC-3 cable.

Cascade
KVM modules



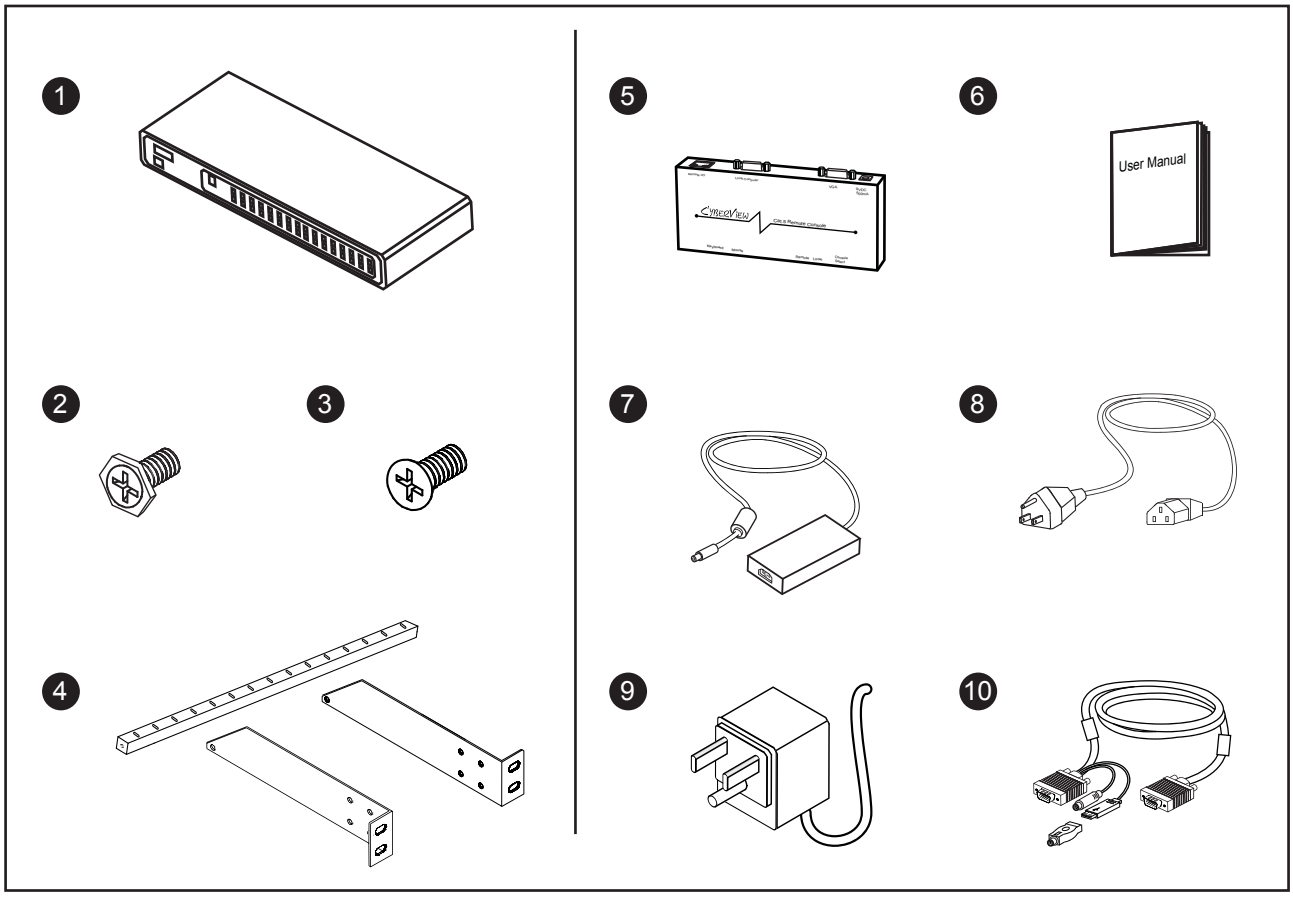


CMC-3 cable

M-IP1613 / M-IP1614 / M-IP1624

Matrix IP DB-15 16 port KVM

Package Content (only for rackmount KVM)



① KVM switch x 1 pc

② Screw M3.2 x 4.5mm x 4 pcs

③ Screw M4 x 10mm x 8 pcs

④ Bracket x 1 set

⑤ Receiver *Qty refer to the below table

⑥ User manual x 2 pcs

⑦ 12V Power adapter (for KVM) x 1 pc

⑧ Power cord x 1 pc

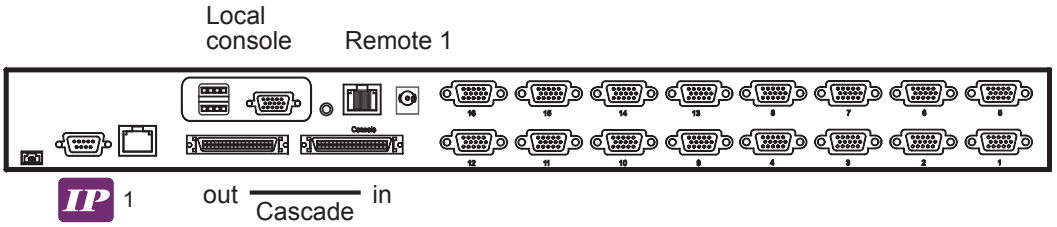
⑨ 12V Power adapter (for receiver) *Qty refer to the below table

⑩ CE-6 Combo 4-in-1 KVM cable (for receiver) *Qty refer to the below table

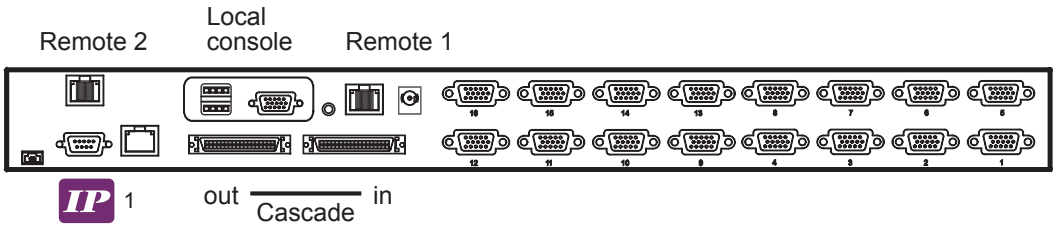
Model	Receiver Qty	12V Power adapter Qty	CE-6 Combo 4-in-1 KVM cable Qty
M-IP1613	1	1	1
M-IP1614	2	2	2
M-IP1624	1	1	1

Connection

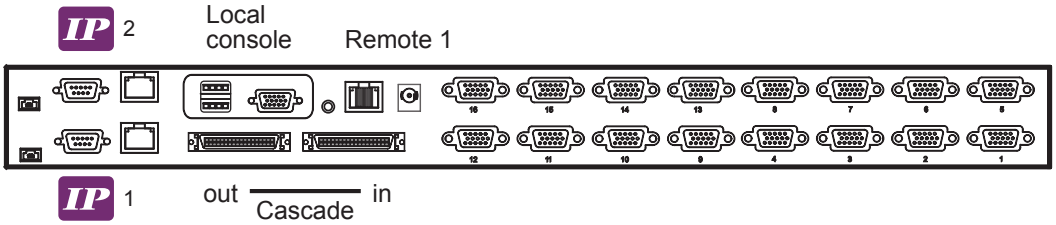
M-IP1613



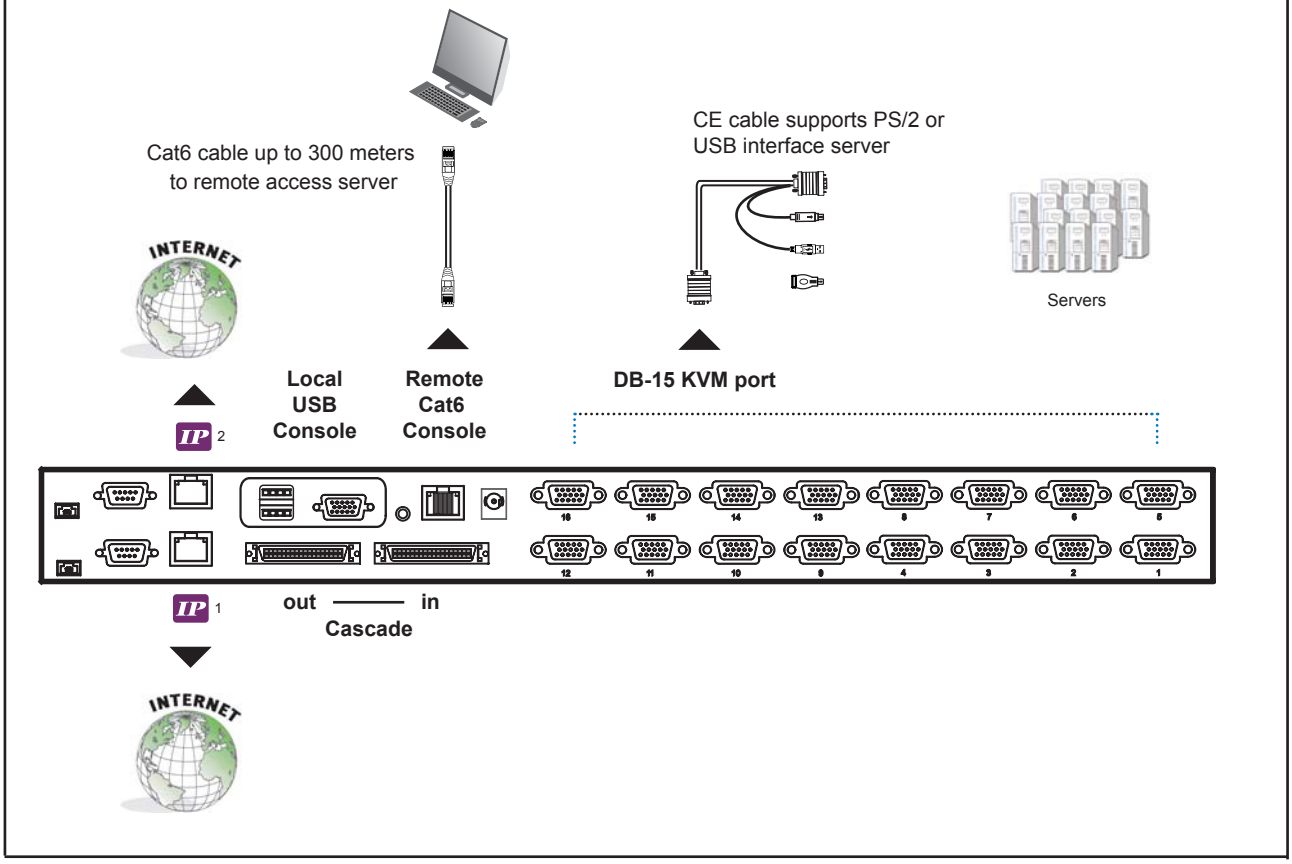
M-IP1614



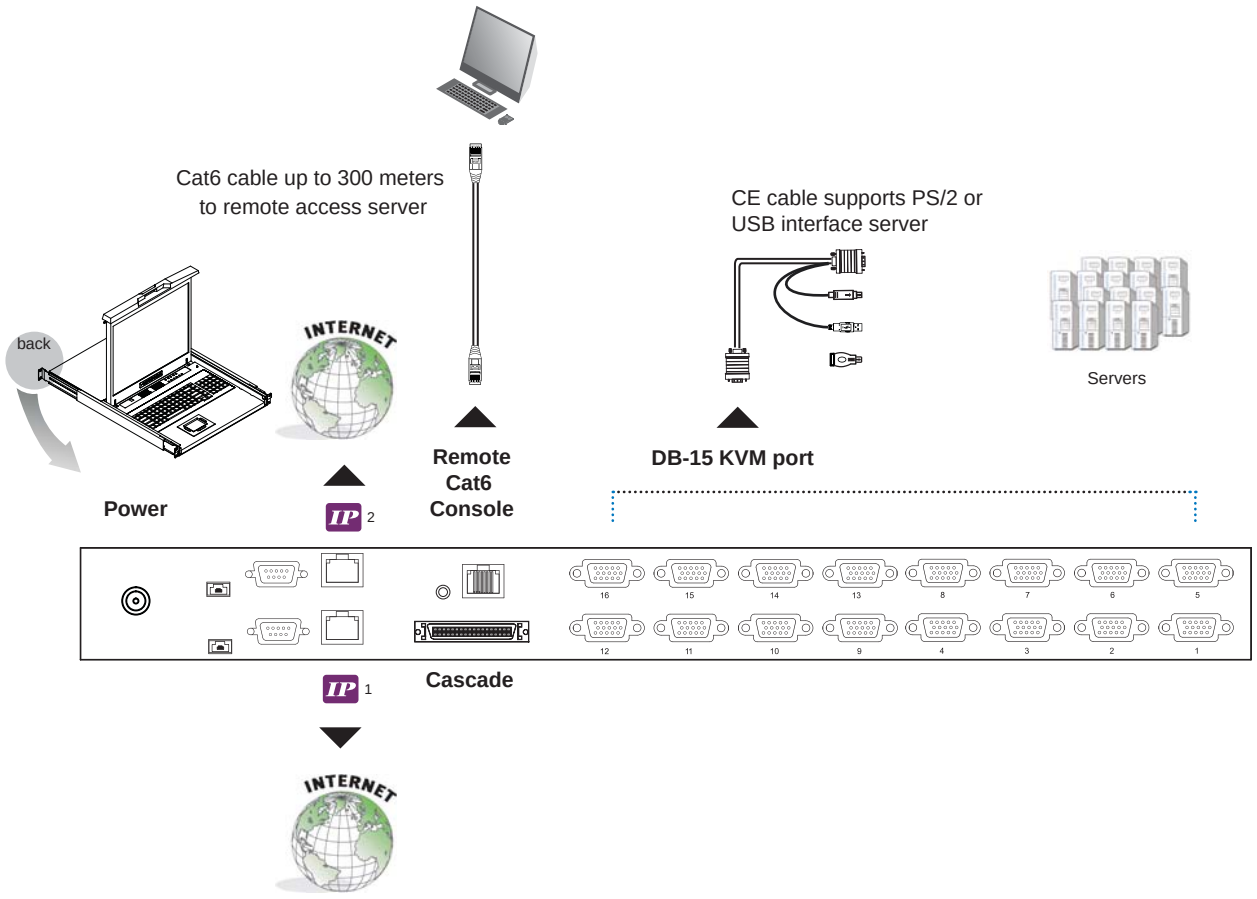
M-IP1624



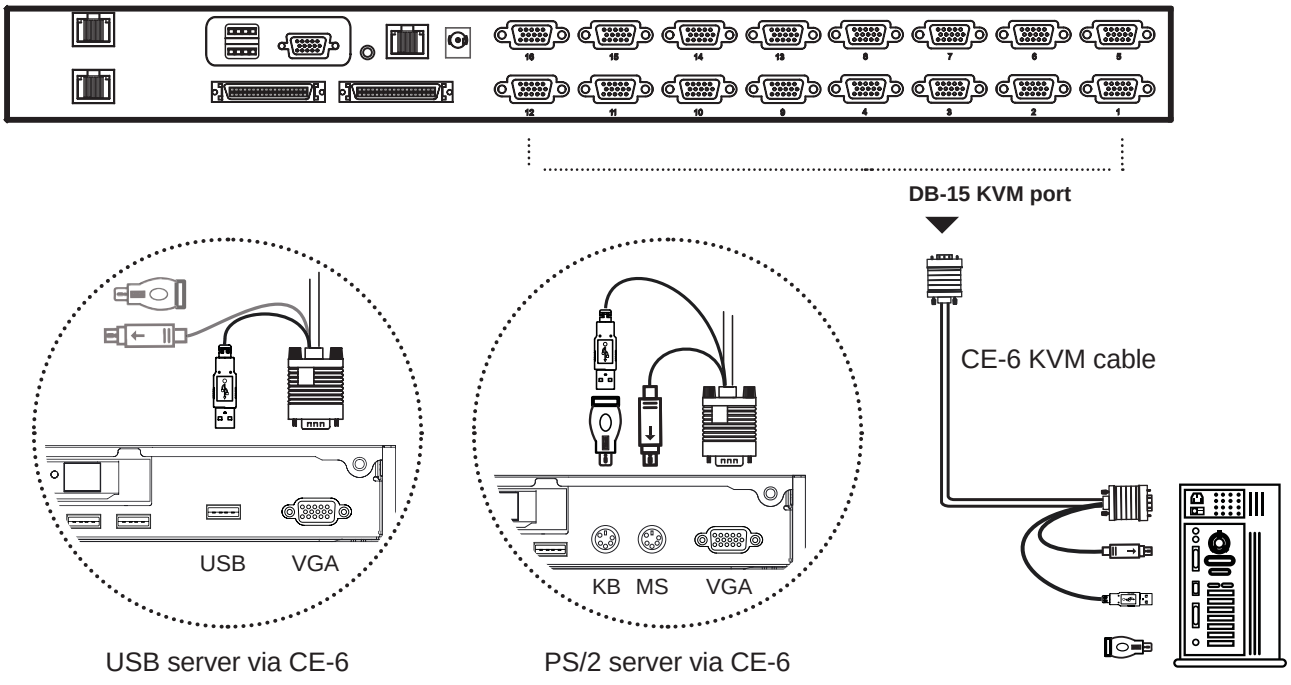
Connection Rackmount KVM



Connection
KVM modules



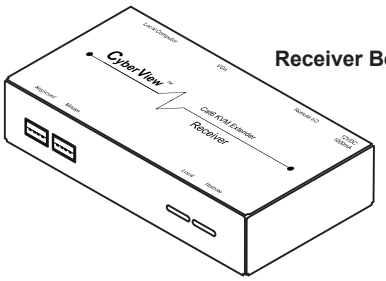
Connection
CE-6

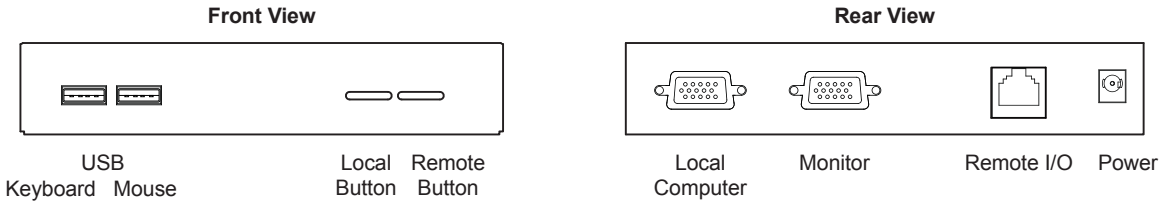


USB server via CE-6

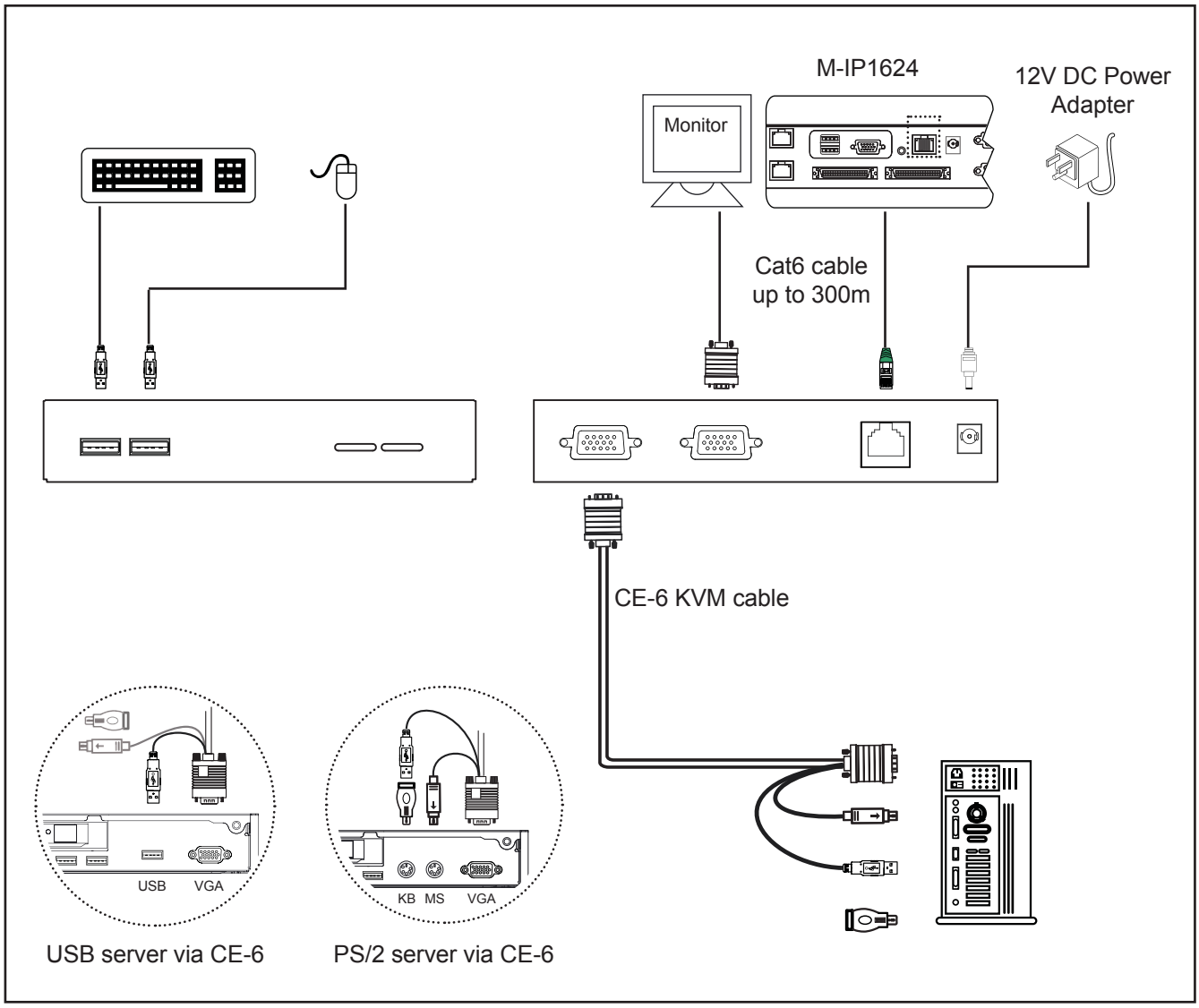
PS/2 server via CE-6

Receiver





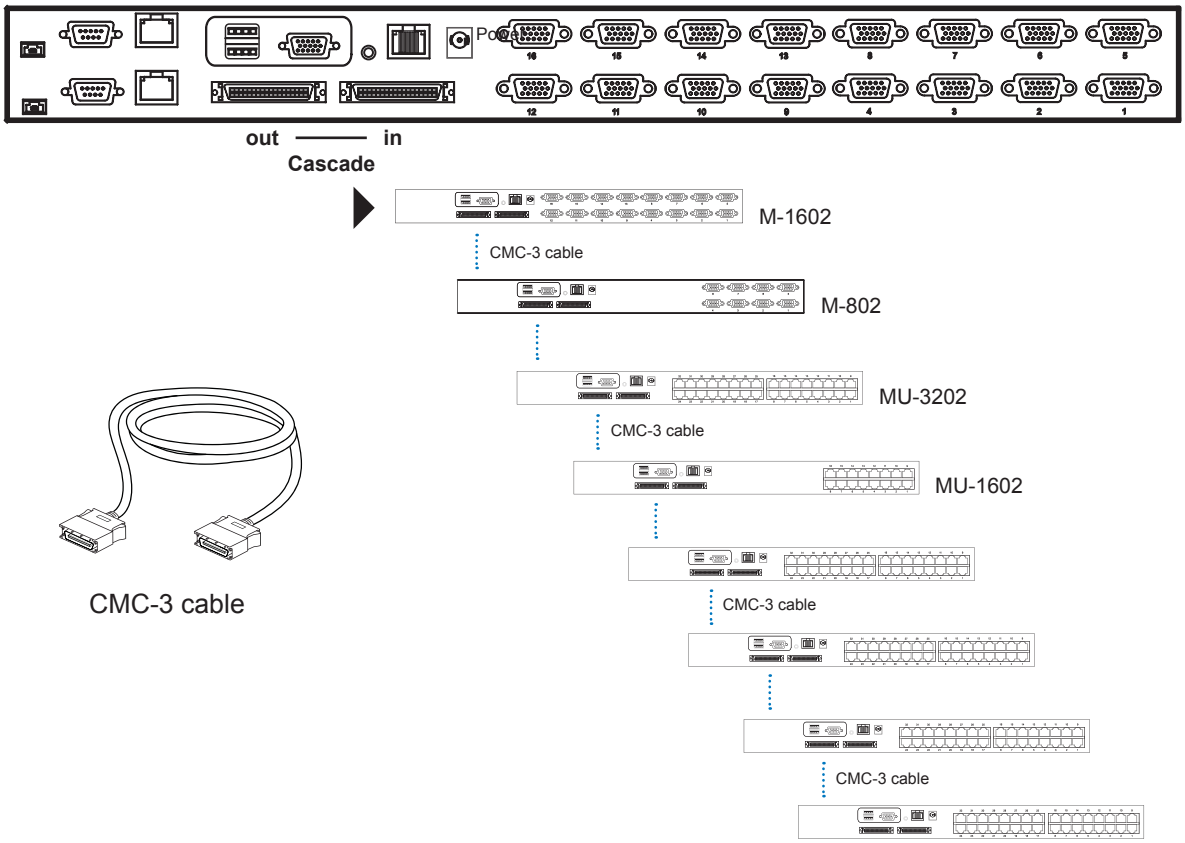
Receiver Connection



Cascade

- Cascade up to 8 levels, 128 servers
- Interconnection with Matrix Cat6 KVM
- Cascading multiple KVM by CMC-3 cable.

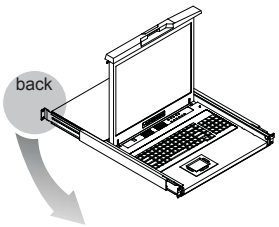
Cascade
Rackmount KVM

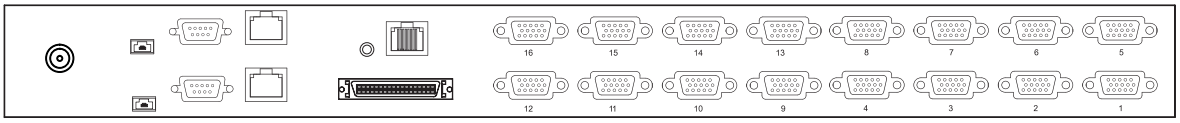


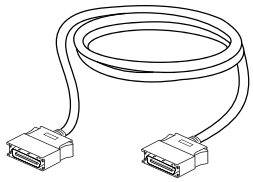
Cascade

- Cascade up to 8 levels, 128 servers
- Interconnection with Matrix Cat6 KVM
- Cascading multiple KVM by CMC-3 cable.

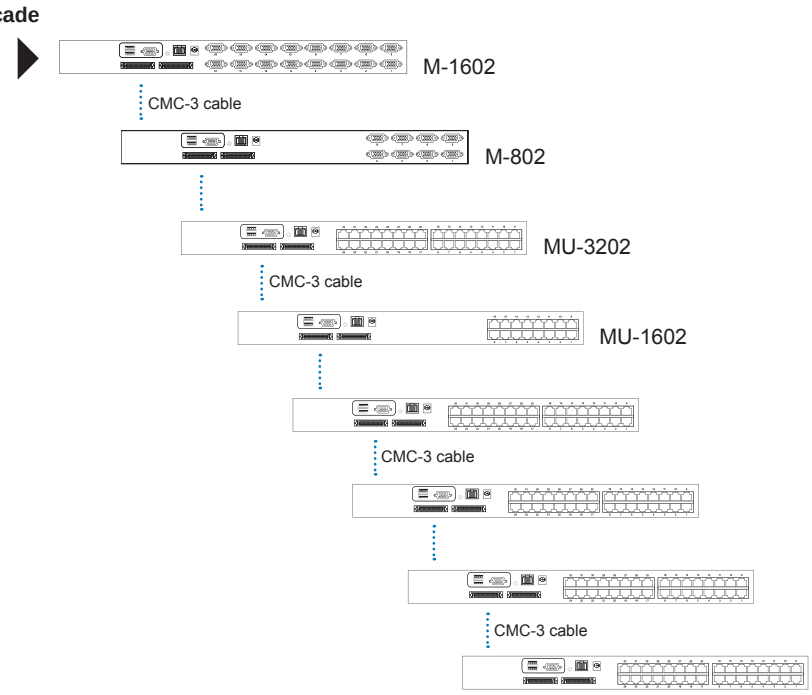
Cascade
KVM modules







CMC-3 cable



M-IP813 / M-IP814 / M-IP824	
■ **KVM Port**	
Number of ports:	8
Connector:	8 x DB-15 combo connector
Connectivity:	Combo 4-in-1 KVM cable up to 6, 10 & 15 feet
■ **Local Console**	
Monitor port:	1 x DB-15 VGA (up to 1600 x 1200)
Keyboard & mouse port:	2 x USB type connector for keyboard & mouse
■ **Cat6 Remote Console**	
Number of remote port:	1 / 2 / 1
Monitor port:	DB15-pin VGA, up to 1600 x 1200
Keyboard & mouse port:	2 x USB type connector for keyboard & mouse
Remote I/O:	RJ45 via Cat5 / Cat5e / Cat6 cable up to 1,000 feet
■ **IP Remote Console**	
Number of IP console:	1 / 1 / 2
User management:	15-user login, 1 x active user
Browser:	Internet Explorer, Firefox, Safari
Security:	SSL v3, RSA, AES, HTTP / HTTPs, CSR
IP Access:	1 x RJ45 Ethernet, 1 x DB-9 serial & 1 x USB port
Remote I/O:	RJ45 via Cat5 / Cat5e / Cat6 cable up to 1,000 feet
■ **Expansion:**	Up to 64 servers by 8-level cascade
■ **Compatibility**	
Multi-platform:	Mix PCs, SUNs, IBMs, HPs, DELLs Server
Support:	Windows Vista / 2003 / XP / 2000, Linux, Netware, Unix
■ **Power**	
Input:	100~240VAC, 50 / 60Hz 0.5A via AC / DC cord
Option DC:	12V / 24V / 48V DC input
Consumption:	Max. 24 Watt, Standby 5 Watt
■ **Regulatory Approval:**	FCC, CE
■ **Environmental**	
Operating:	0 to 50°C
Storage:	-5 to 60°C
Relative humidity:	90%, non-condensing
Shock:	50G peak acceleration (11ms, half-sine wave)
Vibration:	58~100Hz / 0.98G (11ms / cycle)
■ **Product Information**	
Dimension (W x D x H):	448 x 180 x 44 mm / 17.6 x 7.1 x 1.73 inch
Net weight:	4 kg / 9 lb
■ **Packing Information**	
Dimension (W x D x H):	510 x 400 x 77 mm / 20.1 x 15.7 x 3 inch
Gross weight:	7 kg / 15 lb

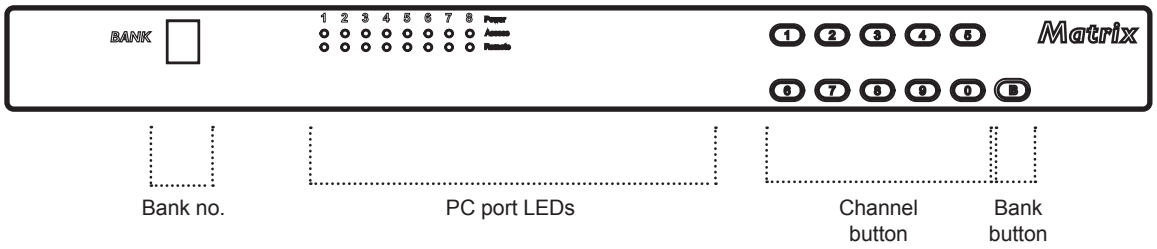
M-IP1613 / M-IP1614 / M-IP1624	
■ **KVM Port**	
Number of ports:	16
Connector:	16 x DB-15 combo connector
Connectivity:	Combo 4-in-1 KVM cable up to 6, 10 & 15 feet
■ **Local Console**	
Monitor port:	1 x DB-15 VGA (up to 1600 x 1200)
Keyboard & mouse port:	2 x USB type connector for keyboard & mouse
■ **Cat6 Remote Console**	
Number of remote port:	1 / 2 / 1
Monitor port:	DB15-pin VGA, up to 1600 x 1200
Keyboard & mouse port:	2 x USB type connector for keyboard & mouse
Remote I/O:	RJ45 via Cat5 / Cat5e / Cat6 cable up to 1,000 feet
■ **IP Remote Console**	
Number of IP console:	1 / 1 / 2
User management:	15-user login, 1 x active user
Browser:	Internet Explorer, Firefox, Safari
Security:	SSL v3, RSA, AES, HTTP / HTTPs, CSR
IP Access:	1 x RJ45 Ethernet, 1 x DB-9 serial & 1 x USB port
Remote I/O:	RJ45 via Cat5 / Cat5e / Cat6 cable up to 1,000 feet
■ **Expansion:**	Up to 128 servers by 8-level cascade
■ **Compatibility**	
Multi-platform:	Mix PCs, SUNs, IBMs, HPs, DELLs Server
Support:	Windows Vista / 2003 / XP / 2000, Linux, Netware, Unix
■ **Power**	
Input:	100~240VAC, 50 / 60Hz 0.5A via AC / DC cord
Option DC:	12V / 24V / 48V DC input
Consumption:	Max. 24 Watt, Standby 5 Watt
■ **Regulatory Approval:**	FCC, CE
■ **Environmental**	
Operating:	0 to 50°C
Storage:	-5 to 60°C
Relative humidity:	90%, non-condensing
Shock:	50G peak acceleration (11ms, half-sine wave)
Vibration:	58~100Hz / 0.98G (11ms / cycle)
■ **Product Information**	
Dimension (W x D x H):	448 x 180 x 44 mm / 17.6 x 7.1 x 1.73 inch
Net weight:	4 kg / 9 lb
■ **Packing Information**	
Dimension (W x D x H):	510 x 400 x 77 mm / 20.1 x 15.7 x 3 inch
Gross weight:	7 kg / 15 lb

Power ON

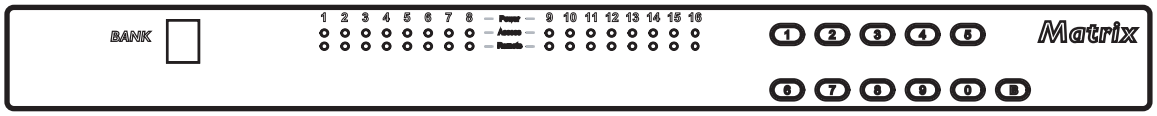
- Turn off all servers and KVM switches
- Make sure all cables / connectors are properly connected
- Recommend Power ON sequence is monitor, KVM switch finally computer

Front Panel - Port LED Indications

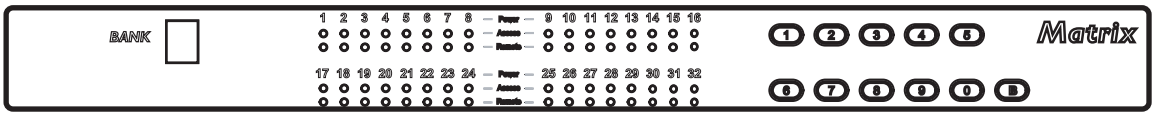
8 ports



16 ports



32 ports



Bank no.	7-Segment BANK LED indication
PC port LEDs	***Power*** : **Blue** LED on indicating a PC is connecting to the port ***Access*** : **Green** LED on indicating a selected channel ***Remote*** : **Red** LED on indicating the port is selecting by a remote console
Channel button	Press to select channel from 01 to 32
Bank button	Select the bank from 1 to 8

Password

The password is disabled by default (i.e. There is no password required when you power on the KVM switch for the first time)

■ **Enable password**

1. Press the KVM hotkey **Scroll Lock + Scroll Lock + U**
2. Logout the KVM by pressing the hotkey **Scroll Lock + Scroll Lock + P**
3. In SUPERVISOR level, enter “00000000” eight zeros in user name & password field **(Do not use “0” on number pad)**
4. In USER level, press **Space bar** + **Enter** in user name & password field

   Remark: Automatic logout after 10 minutes of inactivity

■ **Set your own user name & password**

1. Login the KVM in SUPERVISOR level by pressing “00000000” eight zeros in user name & password field
2. Call KVM OSD menu by pressing the KVM hotkey **Scroll Lock + Scroll Lock + Space Bar**
3. Press **F1** to the MAIN MENU
4. Select “USER SECURITY”
5. Set password in SUPERVISOR & USER level
   a. In the left-top row “S” (SUPERVISOR), press **Enter** to set your own user name & password
   b. In the row 1 to 8 (USER), press **Enter** to set your own user name & password
6. Press **Enter** to save the setting or press **Esc** to cancel the editing without any change

Remark: a. Blank has underscore, while SPACE doesn’t have
b. Press any alphanumeric key to move to next input item. SPACE is treated as a valid character

■ **Change your password**

1. Login the KVM in SUPERVISOR level by pressing your own user name & password
2. Call KVM OSD menu by pressing the KVM hotkey **Scroll Lock + Scroll Lock + Space Bar**
3. Press **F1** to the MAIN MENU
4. Select “USER SECURITY”
5. Change password in SUPERVISOR & USER level
   a. In the left-top row “S” (SUPERVISOR), press **Enter** to change your user name & password
   b. In the row 1 to 8 (USER), press **Enter** to change your user name & password
6. Press **Enter** to save the setting or press **Esc** to cancel the editing without any change

Remark: a. Blank has underscore, while SPACE doesn’t have
b. Press any alphanumeric key to move to next input item. SPACE is treated as a valid character

■ **Disable your password**

1. Press the KVM hotkey **Scroll Lock + Scroll Lock + U**
2. Logout the KVM by pressing the KVM hotkey **Scroll Lock + Scroll Lock + P**
3. You don’t need user name & password to access the KVM OSD menu

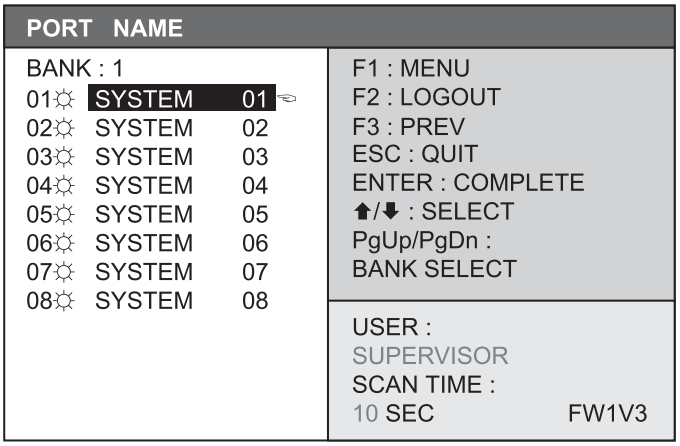
■ **Forget your password**

Please contact your supplier for further support

Remark:

■ You must press the KVM hotkey within 2 seconds
■ A beep sound will be heard for successful entering KVM hotkey

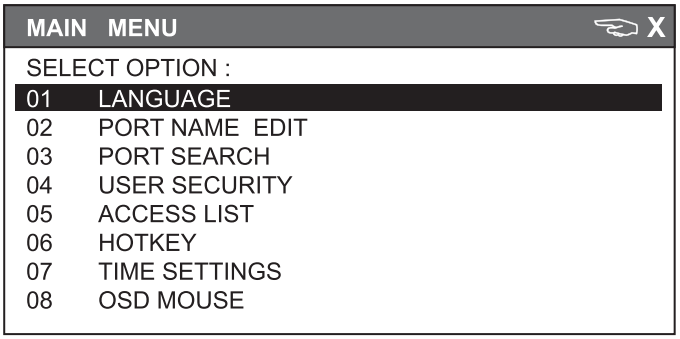
OSD Menu



OSD operation

☼ next to the system name	The PC is powered on
☜ next to the system name	The PC is selected
F1	Access F1 MAIN MENU
F2	Logout the OSD menu
F3	Previous menu
Esc	Cancel / Quit
Enter	Complete / Switch to selected port
⬆/⬇	Switch to previous or next port
PgUp/PgDn	Switch to previous bank or next bank
1 / 2 / 3 / 4	Display port 01 ~ 08 / 09 ~ 16 / 17 ~ 24 / 25 ~ 32 Remark: Display port 17 ~ 32 for 32 port model only

F1 Main Menu



01 LANGUAGE	OSD language change
02 PORT NAME EDIT	Define port name
03 PORT SEARCH	Quick searching by port name
04 USER SECURITY	Change password
05 ACCESS LIST	Define user access authority
06 HOTKEY	Change hotkey
07 TIME SETTINGS	Modify scan display time interval
08 OSD MOUSE	Modify OSD mouse speed

Local Console Hotkey

Hotkey	Function
Scroll Lock + **Scroll Lock** + **Space Bar**	Calling OSD menu
Right-button mouse + **Esc**	Calling OSD menu
Scroll Lock + **Scroll Lock** + ⬆	Switch to previous port
Scroll Lock + **Scroll Lock** + ⬇	Switch to next port
Scroll Lock + **Scroll Lock** + **PgUp / PgDn**	Switch to previous bank or next bank
Scroll Lock + **Scroll Lock** + Bank no. + Port no.	Switch to specific port
Scroll Lock + **Scroll Lock** + **B**	Turn the buzzer ON and OFF * Default the buzzer is ON
Scroll Lock + **Scroll Lock** + **P**	Logout the KVM if password security is ON. Show up the status windows

Advance hotkeys (for Supervisor login only)

Scroll Lock + **Scroll Lock** + **S**	Activate auto-scan mode for connected servers *Press any key to exit the auto-scan mode
Scroll Lock + **Scroll Lock** + **R**	Reset all the KVM settings to factory default *Except User Security settings
Scroll Lock + **Scroll Lock** + **U**	Disable and enable password security *Default security is OFF
Scroll Lock + **Scroll Lock** + **L**	To enable / disable the screen saving function and 10 minutes auto-logout *Default the screen saving is OFF

Remarks:

- Example of "**Scroll Lock** + **Scroll Lock** + Bank no. + Port no."
  - Bank No. : 1 to 8
  - Port No. : 01 to 16
  - e.g. Bank 1 Port 4 : **Scroll Lock** + **Scroll Lock** + **1** + **0** + **4**
  - e.g. Bank 2 Port 16 : **Scroll Lock** + **Scroll Lock** + **2** + **1** + **6**
- You must press the hotkey within 2 seconds
- A beep sound will be heard for successful entering
- The numeric keypad is not supported, while in OSD screen, the arrow keys, PgUp, PgDn, and Enter keys are supports

Remote Console Hotkey

Hotkey	Function
Scroll Lock + **Scroll Lock** + **F1**	Show up the Help OSD windows
Scroll Lock + **Scroll Lock** + **F2**	Select Hotkey *Default is Caps Lock
Scroll Lock + **Scroll Lock** + **C**	Toggle switch between remote & local port
Scroll Lock + **Scroll Lock** + **Q**	Turn the buzzer ON & OFF *Default the buzzer is ON
Scroll Lock + **Scroll Lock** + **S**	Activate auto-scan mode for remote & local port *The scan time interval is 5 seconds
Scroll Lock + **Scroll Lock** + **A**	Auto-adjust the video signal

Quick Installation Guide of IP KVM for remote access

Please perform the follow steps
1. Power off all KVM hardware and connected devices.
2. Connect the power supply to IP KVM
3. Connect the monitor, keyboard & mouse to console port of IP KVM (not applicable to integrated LCD drawer version)
4. Connect the KVM cable to IP KVM and target servers
5. Use an Ethernet cable to connect your local area network (LAN) to the IP console port on the KVM

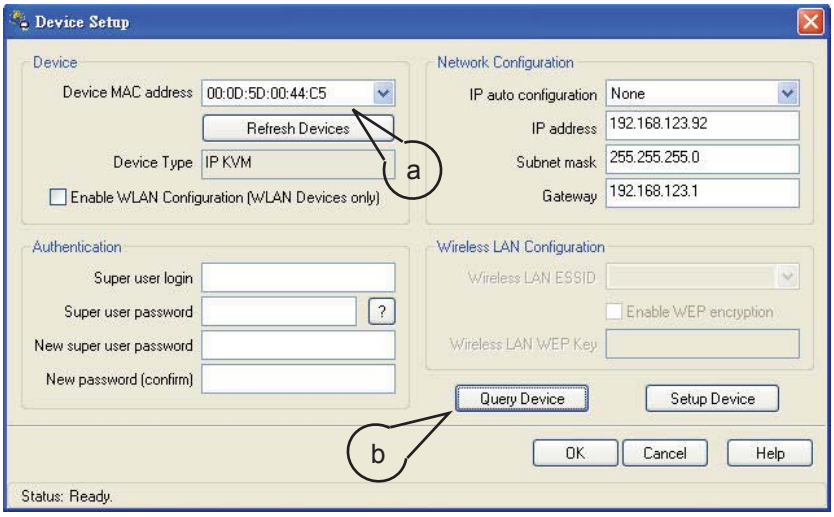
Initial IP configuration

The factory default, DHCP mode is disable (IP auto configuration = None), and the preset default address as below :

IP address : 192.168.1.22 (default)
Subnet-mask : 255.255.255.0
Default Gateway: None

Install the “PSetup.exe” program from the provided CD-disc to a computer which networked with IP KVM switch, then press Refresh Devices the look for the IP-KVM.

a. Select the MAC address from label on the bottom of the IP-KVM switch
b. Click Query Device



1. Configure the IP KVM with fixed address

a. Setup “IP auto configuration” as “None”; setup IP address and Subnet mask
b. Enter Super user login and password for Authentication (default : super/pass)
c. Setup Device. If super login was authenticated, it’ll show “Successfully configured device”. Otherwise it’ll show “Permission Denied”.

2. Configure the IP KVM with DHCP

a. Setup “IP auto configuration” as “DHCP”
b. Enter Super user login and password for Authentication (default : super/pass)
c. Setup Device. If super login was authenticated, it’ll show “Successfully configured device”. Otherwise it’ll show “Permission Denied”.

3. Install JVM on Client system

The IP-KVM switch was remote accessed by a standard JAVA enabled web browser. The client system must install Sun JVM 1.4.2 or above for remote access the IP KVM.

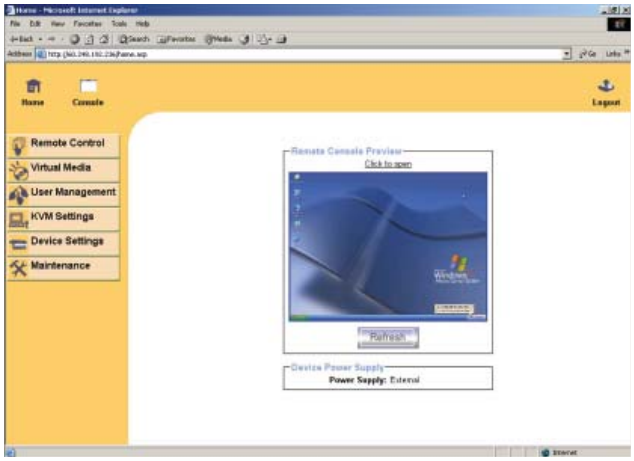
Remark:

■ At a minimum, you must have Internet Explorer 6.0 or Netscape 7.0 or Molliza 1.6 (and above) installed on your client computer.

4. **Remote access the IP-KVM switch via Web**
   Using the HTTP protocol or a secure encrypted connection via HTTPS and entering the configured IP address of IP KVM switch into the web browser to remote access the IP KVM switch.

   With successful connection to IP KVM, the login page will show as below, then key in the default user name & password

5. After successful login to IP KVM, you will enter the main page of IP KVM as below :



Remark:

- We strongly recommend the user changes the default username and password to user specific values
- Please refer to the “IP KVM User Manual” for more detailed information about IP KVM switch.

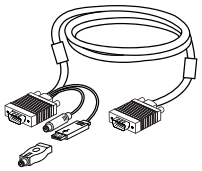
6. Bandwidth

	Compression	Color Depth	Used Bandwidth	Comment
Video Optimized	Video Optimized	8 bit	3.0 - 3.3 MB/s	uncompressed, synchronized video data, most bandwidth needed
Video Optimized (high color)	Video Optimized	16 bit	4.3 - 5.0 MB/s	uncompressed, synchronized video data, most bandwidth needed
LAN (high color)	0 (no compression)	16 bit	1.0 - 1.3 MB/s	uncompressed video data
LAN	0 (no compression)	8 bit	500 - 700 kb/s	uncompressed video data
DSL	2	8 bit	110 - 140 kb/s	slower video because of compression
UMTS	4	8 bit	80 - 100 kb/s	slower video because of compression
ISDN 128k	6	4 bit	20 - 30 kb/s	16 colors
ISDN/Modem V.90	7	2 bit	13 - 17 kb/s	gray scale
GPRS/HSCSD	8	2 bit	5 - 7 kb/s	gray scale
GSM Modem	9 (best compression)	1 bit	1 - 3 kb/s	black&white video

Optional Accessories

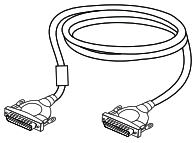
1. Combo KVM cable

1.1 CE-6 6 feet
1.2 CE-10 10 feet
1.3 CE-15 15 feet



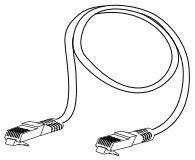
2. Matrix KVM cascade cable

2.1 CMC-3 3 feet



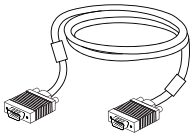
3. Cat5 cable

3.1 CU-3 3 feet
3.2 CU-6 6 feet
3.3 CU-10 10 feet
3.4 CU-15 15 feet
3.5 CU-33 33 feet
3.6 CU-66 66 feet



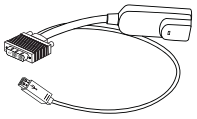
4. Combo KVM cascade cable

4.1 CBC-6 6 feet



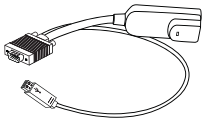
5. DVI-USB Dongle

5.1 DG-100SD DVI-D



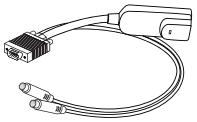
6. VGA-USB Dongle

6.1 DG-100S USB



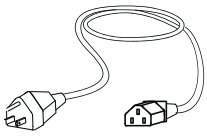
7. VGA-PS/2 Dongle

7.1 DG-100 PS/2

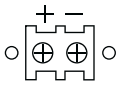


8. Power cord

8.1 IEC power cord
8.2 NEMA 5-15 power cord (US)
8.3 BS 1363 power cord (UK)
8.4 CEE 7/4 power cord (German)
8.5 AS 3112 power cord (Australia)



DC Power 12V, 24V, 48V Input



Model	12V	24V	48V
Input rating			
Input voltage:	12-Volt	24-Volt	48-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V
Input current			
- No load	50 mA	50 mA	50 mA
- Full load	4950 mA	2450 mA	1220 mA
Output rating			
Output voltage:	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A
Efficiency	84%	85%	85%

Remarks:

- Package does not include power cord